To: Mitchell, Stacey[Mitchell.Stacey@epa.gov]; Michaud, John[Michaud.John@epa.gov]

From: Ward, W. Robert

Sent: Fri 8/14/2015 1:05:53 PM

Subject: Fwd: Stabilization of Gold King Portal is Imperative!

Note noon EDT call - should I join that call? Personal Matters/Ex. 6 but otherwise available. Thanks

W. Robert Ward Regional Counsel Region 8 Confidential - Privileged

Begin forwarded message:

From: "Card, Joan" < Card. Joan@epa.gov > Date: August 14, 2015 at 6:29:25 AM MDT

To: "Hestmark, Martin" < <u>Hestmark.Martin@epa.gov</u>>

Cc: "Ward, W. Robert" < Ward.Robert@epa.gov>, "Bohan, Suzanne"

< bohan.suzanne@epa.gov>, "Cheatham, Reggie" < cheatham.reggie@epa.gov>, "Woolford,

James" < Woolford.James@epa.gov>

Subject: Re: Stabilization of Gold King Portal is Imperative!

I emailed selected documents to Mathy, Nitin and OGC. I don't want to get ahead of them. There's a call at 10 MST and I'll know more after that.

Joan Card Senior Policy Advisor Region 8

Sent from my EPA iPhone

On Aug 14, 2015, at 6:26 AM, Hestmark, Martin < Hestmark. Martin@epa.gov > wrote:

Joan - Steve has delivered all that material that shaun carried with him and you and shaun have forwarded to Mathy. Can you prompt Mathy to deliver to Reggie and Jim Woolford?

Sent from my iPhone

On Aug 14, 2015, at 6:10 AM, Card, Joan < <u>Card.Joan@epa.gov</u> > wrote:

Thanks Steve. Let's be sure that OSWER's implementation guidance memo (if it's not final yet) makes it clear that it does not apply to this emergency response. I have a call with OSWER later this morning and I can raise that too.

Joan Card Senior Policy Advisor Region 8

Sent from my EPA iPhone

On Aug 13, 2015, at 11:21 PM, Way, Steven <way.steven@epa.gov> wrote:

Folks

The plan from the beginning was to ensure a stable portal and we have designs/spec already in place based on original plans. We have a contractor already under contract to perform the work. DRMS assisted with this part also for more than a year. We have had an independent Engineering firm assistance, and they are to be onsite Next week. We plan to re-evaluate the current design and determine if modifications are needed given the conditions. We have an engineering team and the mining subcontractors to evaluate this and make recommendations.

Our plan has been in place to do this work. However - the Administrator's statement or interpretations of - ",,shutting down all EPA mine work..." is what everyone has heard. This is the origin of many calls, questions from contractors, officials, ... who are very concerned that we need to continue.

I have assured people that we will not leave this unsecured.

Steve

Sent from my iPhone

On Aug 13, 2015, at 9:04 PM, McGrath, Shaun < McGrath. Shaun@epa.gov > wrote:

Of course. Thx

Sent from my iPhone

On Aug 13, 2015, at 9:03 PM, Hestmark, Martin < Hestmark. Martin@epa.gov > wrote:

I will. Is tomorrow ok?

Sent from my iPhone

On Aug 13, 2015, at 7:53 PM, McGrath, Shaun < McGrath.Shaun@epa.gov > wrote:

Martin,

Please follow up with Bruce and report out. I may want to follow up with Mike King.

Shaun

Sent from my iPhone

On Aug 13, 2015, at 7:41 PM, Hestmark, Martin Hestmark.Martin@epa.gov wrote:

FYI

Sent from my iPhone

Begin forwarded message:

From: "Williams, Laura" <williams.laura@epa.gov>

Date: August 13, 2015 at 12:31:45 PM MDT

To: "Hestmark, Martin" < Hestmark.Martin@epa.gov>

Subject: Fwd: Stabilization of Gold King Portal

is Imperative!

Here is the risk evaluation for the GKM. I'll get you an answer on the photos in 30 minutes.

Sent from my iPhone

Begin forwarded message:

From: "Stover - DNR, Bruce"

<bruce.stover@state.co.us>

Date: August 13, 2015 at 12:03:44 PM MDT

To: Steve Way

< Way. Steven@epamail.epa.gov>

Cc: Allen Sorenson

<allen.sorenson@state.co.us>,
<williams.Laura@epamail.epa.gov>

Subject: Stabilization of Gold King Portal is

Imperative!

Steve,

I'm hearing from my folks that EPA may be stopping work at Gold King indefinitely and leaving it without stabilizing and establishing temporary drainage out of the 7 Level portal....that would be a huge mistake!!!

The worst thing we could do is leave without stabilizing the situation at this portal. In my 35 years of experience with mining and underground construction projects, it is my opinion this portal is overarched, way larger than when mined, and will imminently cave to surface relatively soon.

I inspected the portal late in the afternoon on Aug 5th. There is a large cave Highback/ pocket in the roof just beyond the brow, and the rock is loose and highly jointed. Without some kind of portal stabilization, there is a high degree of probability for a fall of ground or caving at or behind the portal face that will immediately create a new water impoundment. If this portal is left as is it will surely cave this winter or next spring, if not even sooner.

It is imperative at a minimum to at least install some large steel or CMP culverts into the portal, pushing them as far back as possible to allow for free-flow should the portal collapse on top of them. Once these contingency bypass pipes are set into the portal and bedded on top, a larger diameter culvert should also be pushed in under the brow as far through the cave area as possible, with foam-injection tubes attached to the top of the culvert. Then pump in expanding foam through the tubes attached to the top of the large culvert. Even if the foam doesn't completely fill the large cave above, it will at least armor and protect/cushion a large fall of ground onto the top of the culvert, helping keep the portal open so it can free flow.

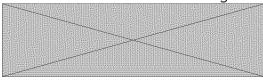
If I can assist in any way with helping identify products, suppliers, contractors who can do this imperative emergency stabilization work, please let me know.

Who can I call at EPA to make sure this portal is not left in an un-stabilized, unprotected dangerous condition?

--

Bruce K. Stover Director

Inactive Mine Reclamation Program



P 303.866.3567 x <u>8146</u> | F 303.832.8106 1313 Sherman Street, Room 215, Denver, CO 80203

bruce.stover@state.co.us |
http://mining.state.co.us